

REMARKS

This amendment is in response to the Office Action mailed May 28, 2009. Claims 1, 2, 10, 22, 24, 25, 27, 28, 31, 32, 34-36, 38, and 45 have been amended. Claims 19, 21, 23, 29, 30, 37, and 39-44 have been cancelled without prejudice. Claim 46 has been added. Claims 1-18, 20, 22, 24-28, 31-36, 38, 45, and 46 are currently pending. No new matter has been added.

Claim Objections

Claim 45 was objected to because of the preamble recited “a connector in combination with an intrabody guidewire or medical coaxial cable.” The Office Action asserts that the claim body recites structure relating to the connector, thereby making it unclear whether the intrabody guidewire/medical cable is actively claimed and if so, the claim body omits structural elements relating to the guidewire/cable. Claim 45 has been amended to depend from claim 1, which recites structural elements relating to the guidewire/cable. Thus, claim 45 now includes structural elements relating to the guidewire/cable. Accordingly, the Applicants respectfully request that the objection to claim 45 be withdrawn. Additionally, because claim 45 now depends from claim 1, the Applicants further request that claim 45 be rejoined with the remaining pending claims.

§112 Rejections

Claims 1-45 were rejected under 35 USC § 112, first paragraph, as failing to comply with the written description statement. Claims 23 and 37-38 were rejected under 35 USC § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The Office Action asserts that the specification as originally filed fails to disclose the combination of a guidewire comprising a connector. Claims 1, 25, and 45 have been amended to remove recitation of a “guidewire” comprising a “connector.” The remaining rejected claims depend from either claim 1 or claim 25. Accordingly, the Applicants respectfully request that the rejections of claims 1-45 be withdrawn.

Claims 23, 30, 37, and 38 were additionally rejected under 35 USC § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which

applicant regards as the invention. The Office Action asserts that the specification as originally filed fails to disclose whercin the guidewire, connector, or guidewire and connector combination comprises an identification parameter. Claims 23, 30, and 37 have been cancelled. Claim 38 has been amended to remove recitation to the identification parameter. Accordingly, the Applicants respectfully request that the rejections of claims 23, 30, 37, and 38 be withdrawn.

Claim 25 was additionally rejected under 35 USC § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The Office Action asserts that the specification as originally filed fails to disclose that the inner conductor contact and the inner conductor define a diameter that is greater than a diameter of the inner conductor. The Applicants respectfully disagree. Paragraph [0040] of the specification of the instant application states that the inner conductor contact 163 may be radially disposed about a portion of the extended section 164. It is clear that a combination of a conductor and a connector disposed radially over the conductor has a diameter that is larger than the conductor by itself. Moreover, Figure 1 of the instant application clearly shows that the diameter of the combination conductor and overlying connector has a diameter that is greater than the diameter of the inner conductor extending along the outer conductor, as recited in claim 25. Thus, the application as originally filed does, in fact, disclose wherein the inner conductor contact and the inner conductor define a diameter that is greater than a diameter of the inner conductor. Accordingly, the Applicants respectfully request that the rejection of claim 25 be withdrawn.

Claims 23, 37, and 38 were additionally rejected under 35 USC § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. As mentioned above, claims 23 and 37 have been cancelled. Claim 38 has been amended to additionally recite “wherein the coaxial cable is a single-use disposable medical device.” All recitation to the identification parameter in claim 38 has been omitted. Accordingly, the Applicants respectfully request that the rejections of claims 23, 37, and 38 be withdrawn.

Claims 23 and 37 were additionally rejected under 35 USC § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The Office Action asserts that the term “and/or” renders the scope of the claims indefinite. As mentioned above, claims 23 and 37 have been cancelled. Accordingly, the Applicants respectfully request that the rejections of claims 23 and 37 be withdrawn.

§103 Rejections

Claims 1-4, 9-29, 31, 33-36, and 39-45 were rejected under 35 U.S.C. §103(a) as being unpatentable U.S. Patent No. 5,792,055 to McKinnon (hereinafter “McKinnon”), in view of U.S. Patent No. 6,675,033 to Lardo et al. (hereinafter “Lardo”). Claims 5-8 were rejected under 35 U.S.C. §103(a) as being unpatentable over McKinnon in view of Lardo as applied to claim 1, further in view of U.S. Patent No. 5,868,674 to Glowinski et al. (hereinafter “Glowinski”). Claims 23, 30, 32, and 37-38 were rejected under 35 U.S.C. §103(a) as being unpatentable over McKinnon in view of Lardo as applied to claims 1 and 25, further in view of U.S. Patent No. 7,273,483 to Wiener et al. (hereinafter “Wiener”). The Applicants traverse these rejections.

Claim 1 recites an MRI guidewire having a proximal end sized and shaped for insertion into a connector coupled to an MRI scanner, the proximal end of the guidewire includes an outer conductor contact coupled electrically to the outer conductor and an extended section of the inner conductor that extends proximally beyond the outer conductor contact, wherein the extended section of the inner conductor includes an inner conductor contact having an electrically conductive material disposed at least partially around a portion of the extended section of the inner conductor, the inner conductor contact coupled electrically to the inner conductor, and an insulated area interposed axially between the outer conductor contact and the inner conductor contact, the insulated area having an electrically insulating material disposed at least partially around at least a portion of the extended section of the inner conductor.

Claim 25 recites an MRI compatible medical coaxial cable having a proximal end sized and shaped for insertion into a connector coupled to an MRI scanner, the proximal end of the coaxial

cable having an outer conductor contact coupled electrically to the outer conductor and an extended section of the inner conductor that extends proximally beyond the outer conductor contact, wherein the extended section of the inner conductor includes an insulated area interposed axially between an outer conductor contact and an inner conductor contact.

Each of claims 1, 25, and 45 were rejected, at least in part, over McKinnon. Claims 1 and 25 each recite an extended portion of an inner connector that extends proximally beyond an outer conductor contact and that has an insulated area interposed axially between an outer conductor contact and an inner conductor contact. McKinnon does not disclose an analogous extended portion of an inner connector. Claim 45 has been amended to depend from claim 1.

McKinnon discloses a medical appliance for use in magnetic resonance imaging procedures, wherein the medical appliance includes a guidewire formed by a coaxial cable acting as antenna in a magnetic resonance imaging system (McKinnon, Abstract). McKinnon further discloses that the proximal end of the coaxial cable is for connection to standard antenna input of control station 12, as shown schematically in Figure 1 [of McKinnon](McKinnon, col. 4 lines 63-65). Thus, McKinnon teaches that the proximal end of the disclosed guidewire is configured and arranged to be received by a standard female coaxial cable connector. Therefore, the proximal end of the guidewire of McKinnon is a standard coaxial cable male connector. Standard coaxial cable male connectors do not have extended sections of inner conductors that extend proximally beyond the outer conductor contact, or an inner conductor contact that has an electrically conductive material disposed at least partially around a portion of the extended section of the inner conductor, or an insulated area that is interposed axially between the outer conductor contact and the inner conductor contact and that is also disposed at least partially around at least a portion of the extended section of the inner conductor, as recited in claims 1 and 25.

The Office Action asserts that McKinnon discloses that the inner conductor extends beyond the outer conductor (Office Action, page 4). McKinnon, however, only teaches that the shield 15 and the outer insulator 16 of the coaxial cable are removed “from a portion of the distal end 17” (McKinnon, col. 4 lines 61-63). McKinnon does not teach that the inner conductor extends beyond

the outer conductor at the proximal end of the guidewire, as recited in claims 1 and 25. The guidewire taught by McKinnon cannot incorporate an inner conductor that extends beyond the outer conductor at the proximal end of the guidewire because, as discussed above, McKinnon teaches that “the proximal end of the coaxial cable is for connection to the standard antenna input of control station 12” (McKinnon, col. 4 lines 63-65). As discussed above, standard coaxial cable male connectors do not have extended sections of inner conductors that extend proximally beyond the outer conductor contact, or an inner conductor contact that has an electrically conductive material disposed at least partially around a portion of the extended section of the inner conductor, or an insulated area that is interposed axially between the outer conductor contact and the inner conductor contact and that is also disposed at least partially around at least a portion of the extended section of the inner conductor.

Accordingly, McKinnon does not teach extended sections of inner conductors that extend proximally beyond the outer conductor contact, or an inner conductor contact that has an electrically conductive material disposed at least partially around a portion of the extended section of the inner conductor, or an insulated area that is interposed axially between the outer conductor contact and the inner conductor contact and that is also disposed at least partially around at least a portion of the extended section of the inner conductor, as recited in claims 1 and 25.

Accordingly, McKinnon does not teach or suggest all of the elements of claims 1 and 25. The additional cited references fail to cure the deficiencies of McKinnon. For at least these reasons claims 1 and 25, as well as claims 2-18, 20, 22, 24, 26-28, 31-36, 38, 45, and 46 which depend therefrom, are patentable over the cited references. The Applicant respectfully requests withdrawal of the rejections of these claims.

In view of the above, each of the presently pending claims in this application is believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to pass this application to issue. If the Examiner has any questions or concerns, the Applicants encourage the Examiner to contact the Applicants' representative, Bruce Black, by telephone to discuss the matter.

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Respectfully submitted,

By _____

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